

SEQUENCE LISTING

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<110> Corvalan, Jose R.F.
      Jia, Xiao-Chi
      Feng, Xiao
      Yang, Xiao-Dong
      Chen, Francine
      Gazit, Gadi
      Weber, Richard
      Bezabeh, Binyam
<120> ANTIBODIES DIRECTED TO PDGFD AND USES
  THEREOF
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<140> US 10/041,860
<141> 2002-01-07
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Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
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Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
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Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
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Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
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35
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Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
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Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 75 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg

<210> 4 <211> 98 <212> PRT <213> homo sapiens

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Ala Arg

<210> 5 <211> 97

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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

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Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
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Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
                           40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
                       55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                   70
                                       75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
Leu Gln Thr Pro
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
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Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
                           40
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro
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Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
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Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Phe Pro

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170
               165
Gln Pro Ala Ala Ser Glu Thr Asn Trp Glu Ser Val Thr Ser Ser
                              185
          180
Ile Ser Gly Val Ser Tyr Asn Ser Pro Ser Val Thr Asp Pro Thr Leu
                          200
    195
Ile Ala Asp Ala Leu Asp Lys Lys Ile Ala Glu Phe Asp Thr Val Glu
                                          220
                      215
Asp Leu Lys Tyr Phe Asn Pro Glu Ser Trp Gln Glu Asp Leu Glu
                  230
                                      235
Asn Met Tyr Leu Asp Thr Pro Arg Tyr Arg Gly Arg Ser Tyr His Asp
                                  250
              245
Arg Lys Ser Lys Val Ala Ser Pro Leu Asp Arg Leu Asn Asp Asp Ala
           260
                              265
Lys Arg Tyr Ser Cys Thr Pro Arg Asn Tyr Ser Val Ala Ser Asn Ile
                       280
                                             285
Arg Glu Glu Leu Lys Leu Ala Asn Val Val Phe Phe Pro Arg Cys Leu
                      295
                                          300
Leu Val Gln Arg Cys Gly Gly Asn Cys Gly Cys Gly Thr Val Ala Ser
                  310
                                       315
Asn Trp Arg Ser Cys Thr Cys Asn Ser Gly Lys Thr Val Lys Lys Tyr
                                  330
               325
His Glu Val Leu Gln Phe Glu Pro Gly His Ile Lys Arg Arg Gly Arg
                              345
Ala Lys Thr Met Ala Leu Val Ala Ser Pro Ile Gln Leu Asp His His
                          360
Glu Arq Cys Asp Cys Ile Cys Ser Ser Arg Pro Pro Arg
                      375
<210> 13
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<400> 13

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe Arg Thr Tyr Asn Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 Ser Ser Ile Ser Ser Ser Ser Ser Asn Ile Tyr Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 70 75 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 90 8.5 Ala Arg Asp Ile Met Ile Thr Phe Gly Gly Ile Ile Ala Ser Phe Tyr 100 105 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 120

<210> 14 <211> 107 <212> PRT <213> homo sapiens

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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
               85
                                   90
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
          100
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<213> homo sapiens
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Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
                               25
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                           40
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                       55
                                           60
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                   70
                                       7.5
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
              85
                                   90
Gly Thr Val Thr Thr Asn Tyr Tyr Gly Met Asp Val Trp Gly Gln
        100
                              105
Gly Thr Thr Val Thr Val Ser Ser
      115
<210> 16
<211> 111
<212> PRT
<213> homo sapiens
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Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser
                               25
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
                           40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
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Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile

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Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
                                     90
Leu Gln Thr Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
                                 105
<210> 17
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
                                25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                    70
                                        75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
               8.5
                                    90
Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly
                               105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                            120
<210> 18
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                                25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
               8.5
                                   90
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
<210> 19
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<212> PRT
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75

<213> homo sapiens

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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                              25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                          40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                      55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                                      7.5
                  70
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                                  90
              85
Ala Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Tyr Gly
                           105
       100
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                          120
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<400> 20

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp 25 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile 40 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Pro Phe 85 90 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys 100

<210> 21 <211> 126 <212> PRT <213> homo sapiens

<400> 21

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 25 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 40 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe 55 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr

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70
                                       75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Asp Val Met Ile Thr Phe Gly Gly Val Ile Val His Tyr Gly
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Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
           20
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys
               85
                                  90
Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg
<210> 23
<211> 126
<212> PRT
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<400> 23
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
                                   10
Ser Leu Lys Ile Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
                               25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                          40
                                              4.5
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                      55
                                          60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                      75
                  70
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                   90
              85
Ala Arg His Val Ser Tyr Tyr Tyr Val Ser Gly Ser Tyr Tyr Asn Val
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Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 125

<210> 24 <211> 107

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
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Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile
                          40
Tyr Ala Ala Ser Ser Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                   75
                70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
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                               90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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<210> 25
<211> 126
<212> PRT
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Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                       55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                   90
              85
Ala Arg Asp Gln Gly Tyr Ser Tyr Gly Tyr Val Tyr Tyr Asp Tyr Gly
        100
                             105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                           120
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<210> 26 <211> 107 <212> PRT

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<400> 26

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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                  70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                   90
              8.5
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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<210> 27
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<213> homo sapiens
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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                       55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                   70
                                       75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                   90
Ala Arg His Gly Ser Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val
                               105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 28
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                      75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
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                                   90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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<210> 29 <211> 129

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<213> HOMO Sapiens

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Lys

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Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
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Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
               85
                                   90
Ala Arg Asp His Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr
                               105
Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                           120
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
                                25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                        75
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Leu
               85
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
<210> 33
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
                                   10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
           20
                               25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                           40
                                               45
Ala Ile Ile Trp Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala Asp Ser Val
                       55
                                          60
Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                  70
                                       7.5
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
               85
                                   90
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Ala Arg Gly Tyr Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr Tyr

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<210> 34
<211> 107
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
                               25
        20
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Leu Ile
                           40
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                      75
Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp
              85
                                   90
Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
          100
<210> 35
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Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Glu
                                   10
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr
                               25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                   70
                                      75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                   90
               85
Ala Arg His Gly Ser Tyr Tyr Asn Ser Gly Ser Tyr Tyr Asn Val
                              105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                          120
<210> 36
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<400> 36
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Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

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5
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
               70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
              85
                                   90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 37
<211> 126
<212> PRT
<213> homo sapiens
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<400> 37

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Tyr 20 25 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 40 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe 55 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Leu Ser Thr Ala Tyr 70 75 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Asp Ile Val Val Val Ala Ala Thr Asn Tyr Tyr Asn Gly 105 100 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 120

<210> 38 <211> 125 <212> PRT <213> homo sapiens

<400> 38

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Ala Arg Gly Ser Gly Tyr Ser Tyr Gly Tyr Asp Tyr Tyr Tyr Gly Met
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                   105
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                         120
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<400> 39
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                 10
Asp Arg Val Thr Ile Asn Cys Arg Ala Ser Gln Gly Ile Ser Asn Asp
                              25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
                          40
Tyr Ala Ala Ser Thr Leu Gln Leu Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                                     75
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Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
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Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                         40
Gly Trp Met Asn Pro Asn Asn Gly Asn Thr Gly Tyr Ala Gln Lys Phe
  50 55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                                    75
                 70
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
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                                 90
Ala Arg Asp Ile Val Val Val Thr Ala Thr Asp Tyr Tyr Gly
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Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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<211> 107 <212> PRT <213> homo sapiens

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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Phe Ala Ala Ser Ser Leu Pro Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                                       75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Ser Gly Tyr Pro Pro
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Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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<400> 43

<210> 44 <211> 127 <212> PRT <213> homo sapiens

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<210> 45 <211> 111 <212> PRT <213> homo sapiens

115

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser 25 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser 40 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Ser Arg Ala Ser Gly Val Pro 55 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile 70 7.5 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Thr 90 85 Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys 100 105

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Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Lys Tyr Ser Pro Ser Phe
                       55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                   70
                                        75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                    90
               8.5
Ala Arg His Tyr Asp Tyr Val Trp Arg Asn Tyr Arg Tyr Thr Gly Trp
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Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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<210> 47
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Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
Ile Tyr Gly Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
                       55
                                            60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
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Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu
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Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
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Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe
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Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr

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Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys
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                85
                                    90
Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met
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Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
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Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
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                                        75
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
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Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
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gtcccgggag cagaacccgg ctttttcttg gagcgacgct gtctctagtc gctgatccca 180
aatgcacegg ctcatctttg tctacactct aatctgegca aacttttgca getgteggga 240
cacttetgea acceegeaga gegeateeat caaagetttg egeaacgeea accteaggeg 300
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aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt accegctcac tttcggcgga 300
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gacteegtga agggeegatt caccatetee agagacaatt ceaagaacae getgtatett 240
caaatqaaca gcctgagagc cgaggacacg gccgtgtatt actgtgcggg aacggtgact 300
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atagcagtgg ctgggacata ctactactac tacggtatgg acgtctgggg ccaagggacc 360
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aggttcagcg gcagtggatc tgggacagat ttcactctca caatcagcag cctgcagcct 240
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<210> 195

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<400> 195
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caaact
<210> 196
<211> 6
<212> DNA
<213> homo sapiens
<400> 196
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atcacc
<210> 197
<211> 6
<212> DNA
<213> homo sapiens
<400> 197
gctcac
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<211> 6
<212> DNA
<213> homo sapiens
<400> 198
attcac
<210> 199
<211> 126
<212> PRT
<213> homo sapiens
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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
              5
                               10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                            25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
 35
                        40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                     55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65 70
                                  75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
           85 90
Ala Arg Asp Val Met Ile Thr Phe Gly Gly Val Ile Val His Tyr Gly
    100 105 110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                       120
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<210> 200 <211> 125

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<212> PRT
<213> homo sapiens
<400> 200
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                           40
Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe
                       55
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
                   70
                                       7.5
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys
                                   90
               85
Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met
          100
                               105
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
      115
                          120
<210> 201
<211> 126
<212> PRT
<213> homo sapiens
<400> 201
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                           40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                       55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                   70
                                       75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
               8.5
Ala Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Gly
                               105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                           120
       115
<210> 202
<211> 126
<212> PRT
<213> homo sapiens
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40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                       55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Leu Ser Thr Ala Tyr
                   70
                                      75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                                  90
Ala Arg Asp Ile Val Val Val Ala Ala Thr Asn Tyr Tyr Asn Gly
                           105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                          120
<210> 203
<211> 125
<212> PRT
<213> homo sapiens
<400> 203
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
                                  10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
         2.0
                              25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                         40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                  55
                                         60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
               70
                                     75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
              85
                                 90
Ala Arg Gly Ser Gly Tyr Ser Tyr Gly Tyr Asp Tyr Tyr Tyr Gly Met
          100
                             105
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                          120
<210> 204
<211> 126
<212> PRT
<213> homo sapiens
<400> 204
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
                                  10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr
                              25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                         40
                                             4.5
Gly Trp Met Asn Pro Asn Asn Gly Asn Thr Gly Tyr Ala Gln Lys Phe
   50 55
                                         60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
           70
                                    75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
              85 90
```

105

Ala Arg Asp Ile Val Val Val Thr Ala Thr Asp Tyr Tyr Tyr Gly

```
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115
                         120
<210> 205
<211> 127
<212> PRT
<213> homo sapiens
<400> 205
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
              5
                                  10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                              2.5
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                          40
Gly Trp Met Asn Pro Asn Ser Gly Asp Thr Gly Tyr Ala Gln Lys Phe
                                          60
                  55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                                     75
                 70
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
                                 90
             85
Ala Arg Met Arg Asp Ile Val Ala Thr Ser Tyr Tyr Tyr Phe Tyr
     100
                             105 110
Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                         120
<210> 206
<211> 117
<212> PRT
<213> homo sapiens
<400> 206
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
                          4.0
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
                      55
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
                  70
                                     75
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
              85
                                 90
Ala Arg Asp His Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr Tyr
                             105
          100
                                                 110
Gly Leu Asp Val Trp
      115
<210> 207
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<211> 125 <212> PRT <213> homo sapiens

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<400> 207
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                               25
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
                           4 0
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
                       55
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
                   70
                                       75
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                                  90
Ala Arg Asp Val Glu Tyr Tyr Tyr Asp Gly Ser Gly Tyr Tyr Tyr Phe
                              105
Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                           120
<210> 208
<211> 126
<212> PRT
<213> homo sapiens
<400> 208
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
               -5
                                   10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe Arg Thr Tyr
                              25
Asn Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                          40
Ser Ser Ile Ser Ser Ser Ser Asn'Ile Tyr Tyr Ala Asp Ser Val
       55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
                  70
                                      75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
               85
                                  90
Ala Arg Asp Ile Met Ile Thr Phe Gly Gly Ile Ile Ala Ser Phe Tyr
                              105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 209
<211> 126
<212> PRT
<213> homo sapiens
<400> 209
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys
               - 5
                                   10
1
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
           20
                               25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                           40
```

Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val

```
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                   7.5
                   70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
               85
                                   90
Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly
                               105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                           120
<210> 210
<211> 126
<212> PRT
<213> homo sapiens
<400> 210
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
                5
                                   10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
                               25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                           40
Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                       55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                       75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
               85
                                    90
```

Ala Arg Asp Gln Gly Tyr Ser Tyr Gly Tyr Val Tyr Tyr Asp Tyr Gly
100 105 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 115 120 125

<210> 211 <211> 127 <212> PRT <213> homo sapiens

<400> 211

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 25 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala Ile Ile Trp Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 70 75 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Gly Tyr Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr 105 Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser .120

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<210> 212
<211> 120
<212> PRT
<213> homo sapiens
<400> 212
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
                               25
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                           40
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                70
                                       75
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
               85
                                   90
Gly Thr Val Thr Thr Asn Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln
          100
                              105
Gly Thr Thr Val Thr Val Ser Ser
<210> 213
<211> 130
<212> PRT
<213> homo sapiens
<400> 213
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
                                   10
Ser Leu Lys Ile Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
           2.0
                               25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Glu Val Gln Leu
                       55
Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu Ser Leu Lys Ile
                   70
                                      75
Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr Trp Ile Gly Trp
               85
                                   90
Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly Ile Ile Tyr
                       105
          100
Pro Gly Asp Ser Asp Thr Arg Tyr Gly Gln Gly Thr Leu Val Thr Val
                          120
Ser Ser
   130
<210> 214
<211> 126
<212> PRT
<213> homo sapiens
<400> 214
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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                       55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                    75
                   70
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
               85
                                  90
Ala Arg His Gly Ser Tyr Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val
                              105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                           120
```

<210> 215 <211> 129 <212> PRT

<213> homo sapiens

<400> 215 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu 10 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr 25 20 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met 40 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe 55 60 Gln Gly Gln Ala Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr 75 70 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys 85 90 Ala Arg His Val Asp Val Gly Ala Thr Ile Gly Gly Tyr Tyr Tyr 100 105 110 Tyr His Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser 115 120

<210> 216 <211> 126 <212> PRT <213> homo sapiens

Ser

<400> 216 Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe

```
55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                   70
                                      75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
               8.5
                                  90
Ala Arg His Gly Ser Tyr Tyr Tyr Asn Ser Gly Ser Tyr Tyr Asn Val
          100
                              105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                           120
<210> 217
<211> 126
<212> PRT
<213> homo sapiens
<400> 217
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
                                   10
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
        20
                               25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                          40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Lys Tyr Ser Pro Ser Phe
                   55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                  70
                                   75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
              85
                                  90
Ala Arg His Tyr Asp Tyr Val Trp Arg Asn Tyr Arg Tyr Thr Gly Trp
                              105
Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 218
<211> 107
<212> PRT
<213> homo sapiens
<400> 218
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1
               5
                           10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
                           40
Tyr Ala Ala Ser Ile Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
Glu Asp Phe Ala Ser Tyr Tyr Cys Gln Gln Ser Asn Ser Phe Pro Arg
                                   90
```

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

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<210> 219
<211> 111
<212> PRT
<213> homo sapiens
<400> 219
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
                                   10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser
                           40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Ser Arg Ala Ser Gly Val Pro
                        55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                    70
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Thr
                                    90
Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
<210> 220
<211> 111
<212> PRT
<213> homo sapiens
<400> 220
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
                                   10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser
                                25
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
                            40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
                        55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                   70
                                        75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
                                    90
              8.5
Leu Gln Thr Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
                               105
<210> 221
<211> 113
<212> PRT
<213> homo sapiens
<400> 221
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
                                   10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
                                25
```

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser 35 40 45 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro

<210> 222 <211> 107 <212> PRT <213> homo sapiens

<213> nomo sapiens

<210> 223 <211> 107 <212> PRT <213> homo sapiens

<400> 223 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr 25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile 40 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Leu 85 90 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

<210> 224 <211> 107

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<212> PRT
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<213> homo sapiens

<400> 224

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr

20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 60

Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
100 105

<210> 225

<211> 108

<212> PRT

<213> homo sapiens

<400> 225

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser 20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu 35 40 45

Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser 50 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu 65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro 85 90 95

Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys

<210> 226

<211> 108

<212> PRT

<213> homo sapiens

<400> 226

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser 20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser 50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu

```
70
                                      75
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu
                                 90
           85
Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
                             105
          100
<210> 227
<211> 107
<212> PRT
<213> homo sapiens
<400> 227
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                  10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                              25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                          40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                  70
                                      75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys
             85
                      90
Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg
<210> 228
<211> 107
<212> PRT
<213> homo sapiens
<400> 228
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                 10
               5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                              25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                         40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                     55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                   75
65 70
Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Pro Phe
                                90
              85
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
          100 ·
<210> 229
<211> 107
<212> PRT
<213> homo sapiens
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<400> 229

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                      75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
                                  90
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
```

<210> 230 <211> 107 <212> PRT

<213> homo sapiens

<400> 230

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 5 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile 40 Tyr Ala Ala Ser Ser Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly 55 60 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp 85 90 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

<210> 231 <211> 107 <212> PRT <213> homo sapiens

<400> 231

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 5 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp 25 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile 4.0 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 60 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp 85 90 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

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<210> 232
<211> 107
<212> PRT
<213> homo sapiens
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
              5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                            25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
    35
                        40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                     55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
              70
                         75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
            85 90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 233
<211> 107
<212> PRT
<213> homo sapiens
<400> 233
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
              5
                                10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                            25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
 35 40
                                          4.5
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                     55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                 70
                             75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
             85
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
<210> 234
<211> 107
<212> PRT
<213> homo sapiens
<400> 234
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                            25
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                   90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 235
<211> 107
<212> PRT
<213> homo sapiens
<400> 235
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                  10
               5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
        2.0
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Phe Ala Ala Ser Ser Leu Pro Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
                                           60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                    75
                   70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Ser Gly Tyr Pro Pro
              85
                                   90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 236
<211> 126
<212> PRT
<213> homo sapiens
<400> 236
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
                                   10
                -5
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
          20
                               25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
```

40 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Asp Val Met Ile Thr Phe Gly Gly Val Ile Val His Tyr Gly

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 120

55

70

85

100

115

75

105 110

90

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<210> 237
<211> 125
<212> PRT
<213> homo sapiens
<400> 237
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
                                   10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                          40
Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe
                   55
                                         60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
                70
                                   75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys
              85
                           90
Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met
                           105 110
         100
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                         120
<210> 238
<211> 125
<212> PRT
<213> homo sapiens
<400> 238
Gln Val Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
                                  10
Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Asp
                              25
Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met Gly
Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe Gln
                      55
Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr Met
Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                  90
Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Tyr Gly Met
                              105
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
       115
                          120
<210> 239
<211> 126
<212> PRT
<213> homo sapiens
<400> 239
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
```

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      Ser
      Val
      Lys
      Cys
      Lys
      Ala
      Ser
      Gly
      Tyr
      Thr
      Phe
      Thr
      Thr
      Tyr
      Met
      Tyr
      Met
      Tyr
      Met
      Tyr
      Met
      Tyr
      Met
      Tyr
      Ala
      Tyr
      Met
      Tyr
      Arg
      Ash
      Tyr
      Arg
      Ash
      Tyr
      Ash
      Ash
      Tyr
      Ash
      Ash
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      Ash
      Ash
      Ash
      Tyr
      Ash
      Ash
      Ash
      Ash
      Tyr
      Ash
      A
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<210> 240 <211> 125 <212> PRT <213> homo sapiens

<400> 240

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 25 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 40 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe 55 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr 75 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg Gly Ser Gly Tyr Ser Tyr Gly Tyr Asp Tyr Tyr Tyr Gly Met 105 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 120 115

<210> 241 <211> 126 <212> PRT <213> homo sapiens

<400> 241

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8.5
Ala Arg Asp Ile Val Val Val Thr Ala Thr Asp Tyr Tyr Tyr Gly
                  105
    100
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                         120
<210> 242
<211> 127
<212> PRT
<213> homo sapiens
<400> 242
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                             25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                        40
Gly Trp Met Asn Pro Asn Ser Gly Asp Thr Gly Tyr Ala Gln Lys Phe
                 55
                                      60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65 70
                                  75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
    85
                             90
Ala Arg Met Arg Asp Ile Val Ala Thr Ser Tyr Tyr Tyr Tyr Phe Tyr
   100 105 110
Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                       120
<210> 243
<211> 127
<212> PRT
<213> homo sapiens
<400> 243
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5
                               10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                            25
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
                        40
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
                  55
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
                 70
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                               90
Ala Arg Asp His Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr Tyr
                            105
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Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 115 120 125

<210> 244 <211> 69

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<212> PRT
<213> homo sapiens
<400> 244
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
                            40
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Gln Gly Thr Leu
Val Thr Val Ser Ser
<210> 245
<211> 126
<212> PRT
<213> homo sapiens
<400> 245
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Glu Thr Phe Ser Ser Tyr
                                25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                   70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly
                               105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                            120
<210> 246
<211> 126
<212> PRT
<213> homo sapiens
<400> 246
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Asp Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
```

75

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

```
90
               8.5
Ala Arg Asp Gln Gly Tyr Ser Tyr Gly Tyr Val Tyr Tyr Asp Tyr Gly
                           105
          100
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                          120
<210> 247
<211> 126
<212> PRT
<213> homo sapiens
<400> 247
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
               5
                                  10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20
                              25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                          40
Ala Ile Ile Trp Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala Asp Ser Val
                      55
Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
     70
Leu Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                 90
Arg Gly Tyr Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr Gly
                              105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                          120
<210> 248
<211> 126
<212> PRT
<213> homo sapiens
<400> 248
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5
Ser Leu Lys Ile Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                       55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                      75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
               85
                                  90
Ala Arg His Val Ser Tyr Tyr Tyr Val Ser Gly Ser Tyr Tyr Asn Val
                             105
           100
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                          120
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<210> 249 <211> 126

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<212> PRT
<213> homo sapiens
<400> 249
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr
                                25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                       55
                                            60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                       7.5
                   70
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
               85
                                   90
Ala Arg His Gly Ser Tyr Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val
                               105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                           120
<210> 250
<211> 129
<212> PRT
<213> homo sapiens
<400> 250
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                        55
                                            60
Gln Gly Gln Ala Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                        75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                    90
Ala Arq His Val Asp Val Gly Ala Thr Ile Gly Gly Tyr Tyr Tyr Tyr
                                105
                                                    110
Tyr His Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
Ser
<210> 251
<211> 126
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<212> PRT <213> homo sapiens

<400> 251

Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Glu 10 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr

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25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                          40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                       55
                                           60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                   70
                                       75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                  90
Ala Arg His Gly Ser Tyr Tyr Tyr Asn Ser Gly Ser Tyr Tyr Asn Val
          100
                              105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                           120
<210> 252
<211> 127
<212> PRT
<213> homo sapiens
<400> 252
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
                                   10
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
                               25
        20
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                          40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Lys Tyr Ser Pro Ser Phe
                      55
                               60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                75
                  70
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Ala Thr Ala Met Tyr Tyr
               85
                                  90
Cys Ala Arg His Tyr Asp Tyr Val Trp Arg Asn Tyr Arg Tyr Thr Gly
                              105
Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                           120
<210> 253
<211> 111
<212> PRT
<213> homo sapiens
<400> 253
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser
                          40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Ser Arg Ala Ser Gly Val Pro
                       55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
```

70

90

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Thr

```
100
                               105
<210> 254
<211> 111
<212> PRT
<213> homo sapiens
<400> 254
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
                             10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                   70
                                       75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
                                   90
              85
Leu Gln Thr Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
                               105
<210> 255
<211> 113
<212> PRT
<213> homo sapiens
<400> 255
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
                5
                                  10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
          20
                               25
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
                          40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
                       55
                                           60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                   70
                                       75
Ser Arg Val Glu Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
                                   90
Leu Gln Ser Leu Met Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile
                               105
Lys
<210> 256
<211> 107
<212> PRT
<213> homo sapiens
<400> 256
```

Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

```
10
Asp Arg Val Thr Ile Asn Cys Arg Ala Ser Gln Gly Ile Ser Asn Asp
                               2.5
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
                           40
Tyr Ala Ala Ser Thr Leu Gln Leu Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                    70
                                        75
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
<210> 257
<211> 107
<212> PRT
<213> homo sapiens
<400> 257
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                5
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
                               2.5
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                       75
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Leu
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
<210> 258
<211> 107
<212> PRT
<213> homo sapiens
<400> 258
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Ile
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro
                                       75
Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp
                                   90
               85
```

Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys

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<210> 259
<211> 108
<212> PRT
<213> homo sapiens
<400> 259
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
                                     10
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
                        55
                                             60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
                    70
                                        75
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
               85
                                    90
Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100
<210> 260
<211> 108
<212> PRT
<213> homo sapiens
<400> 260
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
Ile Tyr Gly Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
                        55
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
                                        75
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu
                                    90
Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
<210> 261
<211> 107
<212> PRT
<213> homo sapiens
<400> 261
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                 5
                                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                                25
```

Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile

```
40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                   55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                70
                                  75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys
                    90
          85
Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg
<210> 262
<211> 107
<212> PRT
<213> homo sapiens
<400> 262
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                     25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                      40
                               45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
              70
                     75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys
                  90
Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg
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<210> 263 <211> 107 <212> PRT <213> homo sapiens

(213) Homo Bapiene

<210> 264 <211> 107

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<212> PRT
<213> homo sapiens
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<210> 265 <211> 107 <212> PRT <213> homo sapiens

<400> 265

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 10 5 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp 20 25 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile 40 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 75 70 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp 90 8.5 Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys

<210> 266 <211> 107 <212> PRT <213> homo sapiens

<400> 266

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Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                           90
        85
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 267
<211> 107
<212> PRT
<213> homo sapiens
<400> 267
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
               85
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100
<210> 268
<211> 107
<212> PRT
<213> homo sapiens
<400> 268
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
               5
                                  10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                             25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                          40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                      75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                   90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 269
<211> 107
<212> PRT
<213> homo sapiens
<400> 269
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<210> 270 <211> 126 <212> PRT <213> homo sapiens

<400> 270

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe Arg Thr Tyr 20 25 Asn Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 Ser Ser Ile Ser Ser Ser Ser Asn Ile Tyr Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 70 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg Asp Ile Met Ile Thr Phe Gly Gly Ile Ile Ala Ser Phe Tyr 105 Phe Asp Tyr Trp Gly Gln Gly Thr Val Leu Thr Val Ser Ser 120

<210> 271 <211> 98 <212> PRT <213> homo sapiens

<400> 271

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1 5 15 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg

<210> 272 <211> 98 <212> PRT <213> homo sapiens <220> <221> VARIANT <222> 28, 30, 33, 57 <223> Xaa = Any Amino Acid <221> VARIANT <222> 28, 30, 33, 57 <223> Xaa = Any Amino Acid <400> 272

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1.0 1 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Xaa Phe Xaa Ser Tyr 20 25 Xaa Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 Ser Ser Ile Ser Ser Ser Ser Xaa Ile Tyr Tyr Ala Asp Ser Val 50 55 60 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 70 75 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg

<210> 273 <211> 108 <212> PRT <213> homo sapiens

<400> 273

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn 25 Asp Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu 40 Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser 55 60 Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln 70 75 Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro 90 Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100

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<210> 274
<211> 96
<212> PRT
<213> homo sapiens
<400> 274
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
Asp Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu
                            40
                                                4.5
Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
                       55
                                           60
Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                    70
                                    75
Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 275
<211> 96
<212> PRT
<213> homo sapiens
<400> 275
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
Asp Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu
                           40
Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
                       55
Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                                       7.5
Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
                                    90
<210> 276
<211> 120
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<212> PRT

<213> homo sapiens

<400> 276

<210> 277 <211> 97 <212> PRT <213> homo sapiens

<210> 278 <211> 96 <212> PRT <213> homo sapiens

Arg

<210> 279 <211> 111 <212> PRT <213> homo sapiens

<400>279 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly

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5
                                     10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
                            40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
                        5.5
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                    70
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
               85
                                    90
Leu Gln Thr Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100
                                105
<210> 280
<211> 100
<212> PRT
<213> homo sapiens
<400> 280
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
                5
                                    10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
                                25
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
                            40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
                       55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                   70
                                        75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala .
Leu Gln Thr Pro
            100
<210> 281
<211> 99
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 31
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 31
<223> Xaa = Any Amino Acid
<400> 281
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1
                                    10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Xaa Ser
                                25
```

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser

| Second | S

<210> 282 <211> 126 <212> PRT <213> homo sapiens

<400> 282 Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Lys 1 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 25 20 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 45 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 70 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 90 85 Ala Arg Asp Gln Gly Tyr Arg Tyr Ala Gly Tyr Tyr Tyr Asp Tyr Gly 105 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 115 120 125

<210> 283 <211> 98 <212> PRT <213> homo sapiens

Ala Arg

<400> 283 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 10 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 45 40 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 55 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 70 75 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 90

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<210> 284
<211> 98
<212> PRT
<213> homo sapiens
<400> 284
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Lys
                                     10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                        75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg
<210> 285
<211> 107
<212> PRT
<213> homo sapiens
<400> 285
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                .5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                                25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                        75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
                                    90
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
<210> 286
<211> 95
<212> PRT
<213> homo sapiens
<400> 286
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
```

20 25 30

Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

```
55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                      75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 287
<211> 95
<212> PRT
<213> homo sapiens
<400> 287
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
    20
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
                                             4.5
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                    55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                70
                               75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 288
<211> 126
<212> PRT
<213> homo sapiens
<400> 288
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
               5
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                          40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                      55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                                      75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                                  90
Ala Arg Glu Gly Ile Ala Val Ala Gly Thr Tyr Tyr Tyr Tyr Gly
                               105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                           120
<210> 289
<211> 98
<212> PRT
<213> homo sapiens
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<400> 289

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30 45

Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85

Ala Arg

<210> 290 <211> 98 <212> PRT <213> homo sapiens

<210> 291 <211> 107 <212> PRT <213> homo sapiens

 <400> 291

 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1

 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp 20

 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile 35

 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50

 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65

 Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Pro Phe 85

 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys

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<210> 292
<211> 95
<212> PRT
<213> homo sapiens
<400> 292
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                  10
               5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
        20
                             25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                         40
                                      45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                  70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 293
<211> 95
<212> PRT
<213> homo sapiens
<400> 293
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
               5
                                  10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                              25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                          40
                                             45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                      75
Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Tyr Pro
                                  90
<210> 294
<211> 126
<212> PRT
<213> homo sapiens
<400> 294
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5
                                  10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                              25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                          40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                      55
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<210> 295 <211> 98 <212> PRT <213> homo sapiens

<400> 295

<210> 296 <211> 98 <212> PRT <213> homo sapiens

<210> 297 <211> 107 <212> PRT <213> homo sapiens <400> 297 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp 25 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile 40 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Asp Pro Cys 8.5 90 Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Arg 100 <210> 298 <211> 95 <212> PRT <213> homo sapiens <400> 298 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp 25 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro <210> 299 <211> 95 <212> PRT <213> homo sapiens <220> <221> VARIANT <222> 94 <223> Xaa = Any Amino Acid

<221> VARIANT

<222> 94

<223> Xaa = Any Amino Acid

<400> 299

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp

```
20
                              25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                          40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                      75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Xaa Pro
<210> 300
<211> 126
<212> PRT
<213> homo sapiens
<400> 300
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
                                  10
Ser Leu Lys Ile Ser Cys Glu Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
                              25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                       40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                   55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                  70
                        75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                 90
Ala Arg His Val Ser Tyr Tyr Tyr Val Ser Gly Ser Tyr Tyr Asn Val
                             105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 301
<211> 98
<212> PRT
<213> homo sapiens
<400> 301
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1
                                  1.0
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
           20
                              25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                          4.0
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                      55
                                  60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                  70
                                  75
```

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys

Ala Arg

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<210> 302
<211> 98
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 23
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 23
<223> Xaa = Any Amino Acid
<400> 302
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
              5
                                10
Ser Leu Lys Ile Ser Cys Xaa Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20
                             25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                  55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                 70
                              75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
Ala Arg
<210> 303
<211> 107
<212> PRT
<213> homo sapiens
<400> 303
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
              5
                                10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                             25
Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile
       35
                         40
                                        45
Tyr Ala Ala Ser Ser Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly
                  55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
               70 75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 304
<211> 95
<212> PRT
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<213> homo sapiens

```
<400> 304
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                  10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
        20
Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Phe Ala Thr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 305
<211> 95
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 56
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 56
<223> Xaa = Any Amino Acid
<400> 305
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
               5
                                  10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                             25
Leu Gly Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Arg Leu Ile
                          40
                                             45
Tyr Ala Ala Ser Ser Leu Gln Xaa Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                  70
                                      75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 306
<211> 126
<212> PRT
<213> homo sapiens
<400> 306
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1
               5
                                  1.0
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Tyr
                               25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
```

<210> 307 <211> 98 <212> PRT <213> homo sapiens

<400> 307

<210> 308 <211> 98 <212> PRT <213> homo sapiens

<400> 308

<210> 309

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<211> 107
<212> PRT
<213> homo sapiens
<400> 309
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                    75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
               85
                                   90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
           100
<210> 310
<211> 95
<212> PRT
<213> homo sapiens
<400> 310
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                   1.0
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           4.0
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
            . 55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 311
<211> 95
<212> PRT
<213> homo sapiens
<400> 311
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
               5
                                   1.0
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asp Asn
                               25
```

Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile 35 40 45 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

```
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro 85 90 95
```

<210> 312 <211> 98 <212> PRT <213> homo sapiens <400> 312 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr 25 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met 40 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe 55 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr 75 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala Arg <210> 313 <211> 126 <212> PRT <213> homo sapiens <400> 313 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu 10 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr 2.5 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met 4.0 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe 55 60 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr 70 75 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys 85 90 Ala Arg His Gly Ser Tyr Tyr Gly Ser Glu Thr Tyr Tyr Asn Val 105 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 120 <210> 314 <211> 98 <212> PRT

<213> homo sapiens

<220>

<221> VARIANT

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<222> 28
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 28
<223> Xaa = Any Amino Acid
<400> 314
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
                                   10
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Xaa Phe Thr Ser Tyr
                               25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                       55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                  70
                                    75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
Ala Arg
<210> 315
<211> 95
<212> PRT
<213> homo sapiens
<400> 315
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                  10
               5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                               25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                      75
                70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
               8.5
<210> 316
<211> 107
<212> PRT
<213> homo sapiens
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<400> 316

```
55
                                        60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                  70
                                    75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                90
             85
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 317
<211> 95
<212> PRT
<213> homo sapiens
<400> 317
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                10
              5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                      25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
           40
                                  45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55
                                60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
               70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
                                90
<210> 318
<211> 98
<212> PRT
<213> homo sapiens
<400> 318
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                   55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                 75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
Ala Arg
<210> 319
<211> 129
<212> PRT
<213> homo sapiens
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<400> 319

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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                     55
                                       60
Gln Gly Gln Ala Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
               70
                                7.5
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
             85
                                90
Ala Arg His Val Asp Val Gly Ala Thr Ile Gly Gly Tyr Tyr Tyr
  100 105
                                   110
Tyr His Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
              120
Ser
```

```
<210> 320
<211> 98
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 68
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 68
<223> Xaa = Any Amino Acid
<400> 320
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
                               25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                      55
Gln Gly Gln Xaa Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                                       75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
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<210> 321 <211> 100 <212> PRT <213> homo sapiens <400> 321

Ala Arg

<210> 322 <211> 114 <212> PRT <213> homo sapiens

<400> 322 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly 5 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser 25 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser 40 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro 60 55 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile 7.5 70 Ser Arg Val Glu Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Ala 85 90 Leu Gln Thr Pro Leu Met Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu 105

<210> 323 <211> 99 <212> PRT <213> homo sapiens

Ile Lys

Leu Gln Ser

<210> 324 <211> 98 <212> PRT

<213> homo sapiens

<210> 325 <211> 127 <212> PRT <213> homo sapiens

Ala Arg

<400> 325 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 55 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 75 80 70 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 95 Ala Arg Asp His Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr 105

Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

<210> 326 <211> 98 <212> PRT <213> homo sapiens <400> 326

<210> 327 <211> 96 <212> PRT <213> homo sapiens

<210> 328 <211> 108 <212> PRT <213> homo sapiens

<400> 328 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 5 10 Asp Arg Val Phe Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn 25 Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu 40 Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser 55 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln 70 75 Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro 90 85 Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100

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<210> 329
<211> 96
<212> PRT
<213> homo sapiens
<400> 329
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                5
                                   10
Asp Arg Val Phe Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn
        20
                               25
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu
                           40
                                               45
Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
                       55
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
                   70
Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro
<210> 330
<211> 98
<212> PRT
<213> homo sapiens
<400> 330
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5
                                   10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
                               25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                           40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                       55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg
<210> 331
<211> 127
<212> PRT
<213> homo sapiens
<400> 331
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
                                  10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
```

Gly Met His Trp Val Arg Gln Åla Pro Gly Lys Gly Leu Glu Trp Val 35 40 45 Ala Ile Ile Trp Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala Asp Ser Val

```
Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                        7.5
                   70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
               85
                                   90
Ala Arg Gly Tyr Tyr Tyr Asp Ser Ser Asp Tyr Leu Tyr Tyr Tyr Tyr
                            105
         100
Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                           120
<210> 332
<211> 98
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 56, 57
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 56, 57
<223> Xaa = Any Amino Acid
<400> 332
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
                                    10
                5
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
                                25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                           40
Ala Ile Ile Trp Tyr Asp Gly Xaa Xaa Lys Tyr Tyr Ala Asp Ser Val
                      55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                        75
                70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg
<210> 333
<211> 95
<212> PRT
<213> homo sapiens
<400> 333
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
```

```
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro
               85
<210> 334
<211> 107
<212> PRT
<213> homo sapiens
<400> 334
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
                              25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Asn Leu Leu Ile
                          40
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Ser Leu Gln Pro
                                      75
                   70
Glu Asp Val Ala Ala Tyr Tyr Cys Gln Lys Cys Asn Ser Ala Pro Trp
               85
                                 90
Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
           100
                              105
<210> 335
<211> 95
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 45, 85, 91
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 45, 85, 91
<223> Xaa = Any Amino Acid
<400> 335
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5
                      10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
                              25
```

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Xaa Leu Leu Ile

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

Glu Asp Val Ala Xaa Tyr Tyr Cys Gln Lys Xaa Asn Ser Ala Pro

55

<210> 336 <211> 98

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<212> PRT
<213> homo sapiens
<400> 336
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                            40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                       55
                                            60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                    70
                                   75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                    90
Ala Arg
<210> 337
<211> 126
<212> PRT
<213> homo sapiens
<400> 337
Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Glu
                5
                                    1.0
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr
                                25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                      55
                                          60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                   70
                                       75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                   90
Ala Arg His Gly Ser Tyr Tyr Tyr Asn Ser Gly Ser Tyr Tyr Asn Val
                               105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                            120
       115
<210> 338
<211> 98
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 9, 28
<223> Xaa = Any Amino Acid
<221> VARIANT
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<222> 9, 28

<223> Xaa = Any Amino Acid

<400> 338 Glu Val Gln Leu Val Gln Ser Gly Xaa Glu Val Lys Lys Pro Gly Glu 5 10 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Xaa Phe Thr Ser Tyr 25 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met 40 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr 70 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala Arg <210> 339 <211> 95 <212> PRT <213> homo sapiens

<210> 340 <211> 107 <212> PRT <213> homo sapiens

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<210> 341
<211> 95
<212> PRT
<213> homo sapiens
<400> 341
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                                25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                 70
                                75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 342
<211> 98
<212> PRT
<213> homo sapiens
<400> 342
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                           40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                      55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                   70
                                        75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                                   90
Ala Arg
<210> 343
<211> 125
<212> PRT
<213> homo sapiens
<400> 343
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
                                   10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                               25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                           40
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<210> 344 <211> 98 <212> PRT <213> homo sapiens

<400> 344

<210> 345 <211> 95 <212> PRT <213> homo sapiens

<210> 346 <211> 107 <212> PRT

<213> homo sapiens

<400> 346 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 5 10 Asp Arg Val Thr Ile Asn Cys Arg Ala Ser Gln Gly Ile Ser Asn Asp 20 25 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile 40 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe 90 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys

<210> 347 <211> 95 <212> PRT <213> homo sapiens

<220>
<221> VARIANT
<222> 22, 32, 56
<223> Xaa = Any Amino Acid

<221> VARIANT <222> 22, 32, 56

<223> Xaa = Any Amino Acid

<210> 348 <211> 98 <212> PRT <213> homo sapiens

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Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                           40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                       55
                                           60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                70
                                       75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg
<210> 349
<211> 126
<212> PRT
<213> homo sapiens
<400> 349
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr
                               25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                           40
Gly Trp Met Asn Pro Asn Asn Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                       55
                                           60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                   70
                                       75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                                  90
               85
Ala Arg Asp Ile Val Val Val Thr Ala Thr Asp Tyr Tyr Gly
           100
                               105
                                                   110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                           120
<210> 350
<211> 98
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 55
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 55
<223> Xaa = Any Amino Acid
<400> 350
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
               5
                                   10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
```

20 25 30
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met

```
40
Gly Trp Met Asn Pro Asn Xaa Gly Asn Thr Gly Tyr Ala Gln Lys Phe
             55
                                        60
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
           70
                                  75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                                 90
Ala Arg
<210> 351
<211> 95
<212> PRT
<213> homo sapiens
<400> 351
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                           25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                                           45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
                                        60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                  70
                                     7.5
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro
<210> 352
<211> 107
<212> PRT
<213> homo sapiens
<400> 352
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                    10
1
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
            40
Phe Ala Ala Ser Ser Leu Pro Ser Gly Val Pro Ser Arg Phe Ser Gly
                      55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                  70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Ser Gly Tyr Pro Pro
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
```

<210> 353 <211> 95 <212> PRT

<213> homo sapiens

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<220>
<221> VARIANT
<222> 55, 92, 93
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 55, 92, 93
<223> Xaa = Any Amino Acid
<400> 353
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                5
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                              25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
Tyr Ala Ala Ser Ser Leu Xaa Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Xaa Xaa Tyr Pro
<210> 354
<211> 126
<212> PRT
<213> homo sapiens
<400> 354
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5
                                   10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
               . 55
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
                                        75
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                                   90
               85
Ala Arg Asp Val Glu Tyr Tyr Tyr Asp Gly Ser Gly Tyr Tyr Tyr Tyr
                               105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                           120
<210> 355
<211> 98
<212> PRT
<213> homo sapiens
<400> 355
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
```

```
      Ser
      Val
      Lys
      Cys
      Lys
      Ala
      Ser
      Gly
      Tyr
      Thr
      Phe
      Thr
      Ser
      Tyr

      Gly
      Ile
      Ser
      Trp
      Val
      Arg
      Gln
      Ala
      Pro
      Gly
      Gln
      Gly
      Leu
      Glu
      Trp
      Met

      Gly
      Trp
      Ile
      Ser
      Ala
      Tyr
      Asn
      Gly
      Asn
      Thr
      Asn
      Tyr
      Ala
      Gln
      Lys
      Leu

      Gln
      Gly
      Arg
      Val
      Thr
      Met
      Thr
      Asn
      Thr
      Asn
      Tyr
      Ala
      Gln
      Lys
      Leu

      Gln
      Gly
      Arg
      Val
      Thr
      Met
      Thr
      Asp
      Thr
      Ser
      Thr
      Ala
      Tyr
      Ala
      Tyr
      Ro

      Met
      Glu
      Leu
      Arg
      Ser
      Asp
      Asp
      Thr
      Ala
      Val
      Tyr
      Tyr
      Cys
      95
      Yar
      Tyr
      Cys
      95
      Yar
      Yar
      Yar
      Yar
      Yar
      Yar
      Yar<
```

<211> 98 <212> PRT <213> homo sapiens <400> 356 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 55 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 70 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg

<210> 357 <211> 108 <212> PRT <213> homo sapiens

<400> 357

<210> 356

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<210> 358
<211> 95
<212> PRT
<213> homo sapiens
<400> 358
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
                                    10
                5
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
         2.0
                                25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
                           40
                                               45
Tyr Ala Ala Ser Ile Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                       75
                 70
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Phe Pro
               85
<210> 359
<211> 95
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 53
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 53
<223> Xaa = Any Amino Acid
<400> 359
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
                                   10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
                                25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
                           40
Tyr Ala Ala Ser Xaa Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                   70
                                       75
Glu Asp Phe Ala Ser Tyr Tyr Cys Gln Gln Ser Asn Ser Phe Pro
<210> 360
<211> 127
<212> PRT
<213> homo sapiens
```

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

<400> 360

```
5
                                    10
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
                                25
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                            40
 Gly Trp Met Asn Pro Asn Ser Gly Asp Thr Gly Tyr Ala Gln Lys Phe
                        55
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                    70
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
Ala Arg Met Arg Asp Ile Val Ala Thr Ser Tyr Tyr Tyr Phe Tyr
                             105
Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
<210> 361
<211> 98
<212> PRT
<213> homo sapiens
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
                                    10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
          20
                                25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                           40
Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
                    55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                70
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg
<210> 362
<211> 98
<212> PRT
<213> homo sapiens
<220>
<221> VARIANT
<222> 57
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 57
<223> Xaa = Any Amino Acid
<400> 362
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
```

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

```
20
                             25
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                4.0
Gly Trp Met Asn Pro Asn Ser Gly Xaa Thr Gly Tyr Ala Gln Lys Phe
                                       60
        55
Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
                              75
65 70
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
             85
                   90
Ala Arg
<210> 363
<211> 111
<212> PRT
<213> homo sapiens
<400> 363
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
                            25
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Ser Arg Ala Ser Gly Val Pro
                     55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                                    75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Thr
Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
<210> 364
<211> 100
<212> PRT
<213> homo sapiens
<400> 364
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1
              5
                      10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
          20
                             25
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Leu Lys Pro Gly Gln Ser
                         40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
                      55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
```

Leu Gln Thr Pro

100

75

90

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala

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<210> 365
 <211> 99
 <212> PRT
 <213> homo sapiens
<220>
<221> VARIANT
<222> 43, 58, 96
<223> Xaa = Any Amino Acid
<221> VARIANT
<222> 43, 58, 96
<223> Xaa = Any Amino Acid
<400> 365
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
                                   10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
     20
                                25
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Xaa Lys Pro Gly Gln Ser
                            40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Xaa Arg Ala Ser Gly Val Pro
                       55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                70
                                    75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Xaa
Leu Gln Thr
<210> 366
<211> 126
<212> PRT
<213> homo sapiens
<400> 366
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Lys Tyr Ser Pro Ser Phe
                       55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                   70
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
               85
                                   90
Ala Arg His Tyr Asp Tyr Val Trp Arg Asn Tyr Arg Tyr Thr Gly Trp
                               105
Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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<210> 367</211> 98

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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
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Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
                               2.5
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
       35
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                    55
                                          60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                  70
                                    75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
              85
                                   90
Ala Arg
<210> 368
<211> 98
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<221> VARIANT
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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
                               25
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                           40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Xaa Lys Tyr Ser Pro Ser Phe
                       55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                  70
                                       75
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                   90
Ala Arg
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<211> 108 <212> PRT <213> homo sapiens <400> 369

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro

<210> 371 <211> 95 <212> PRT <213> homo sapiens <220> <221> VARIANT <222> 54 <223> Xaa = Any Amino Acid

70

<210> 370

<221> VARIANT <222> 54

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                       5.5
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
                   70
                                       75
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser
                                  90
               85
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<211> 125 <212> PRT <213> homo sapiens <400> 372 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 40 Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe 55 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys 90

Val Arg Gly Phe Gly Tyr Ser Tyr Asn Tyr Asp Tyr Tyr Tyr Gly Met

105 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 120

<210> 373 <211> 98 <212> PRT

<213> homo sapiens

<400> 373

<210> 372

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 25 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 40 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Asp Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 70 75 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg

<210> 374 <211> 98 <212> PRT

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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
                            40
Gly Trp Ile Asn Pro Asn Ser Gly Asn Thr Xaa Tyr Ala Gln Lys Phe
                        55
                                            60
Gln Gly Arg Val Thr Met Thr Arg Xaa Thr Ser Ile Ser Thr Ala Tyr
                    70
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys
                                    90
Xaa Arg
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<211> 108
<212> PRT
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                                    1.0
                5
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
                                25
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
                            40
Ile Tyr Ala Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
                       55
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
                   70
                                        75
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
               85
Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
<210> 376
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<212> PRT
<213> homo sapiens
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Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly

<210> 377 <211> 96 <212> PRT

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<400> 377